



STATE OF TENNESSEE
DEPARTMENT OF ENVIRONMENT AND CONSERVATION
Division of Water Resources
Knoxville Environmental Field Office
3711 Middlebrook Pike
Knoxville, Tennessee 37921

December 18, 2014

Mr. Ricky Rose
Chairman, Anderson County Water Authority
P.O. Box 70
Clinton, Tennessee 37717

RE: Compliance Evaluation Inspection
Anderson County Water Authority WTP#1
NPDES Permit # 0073253, Anderson County

Dear Mr. Rose:

On November 21, 2014, Division of Water Supply personnel conducted a Compliance Evaluation Inspection regarding the filter backwash discharge at Anderson County Water Authority's Water Treatment Plant #1. Anderson County Water Authority's (ACWA) approval to discharge filter backwash water falls under the National Pollution Discharge Elimination System (NPDES) permit # TN0073253. The Division would like to thank Mr. Jeff Elliott, and ACWA for their cooperation on the day of the inspection and for providing information on ACWA's filter backwash discharge process.

Permit

A copy of the water system's NPDES permit was on file and available for review. The permit is scheduled to expire on June 30, 2015. The water system will need to submit a new Notice of Intent package prior to June 30, 2015, in order to continue discharging.

ACWA WTP #1 is required by their discharge permit to grab sample once a month for Total Suspended Solids, pH, Aluminum, Iron, Settable Solids and total chlorine residual during times of discharge to the Clinch River. Instantaneous flows are also required to be reported. These flows are based on the amount of backwash water sent to the lagoon since the water treatment plant does not meter the discharge point. Typical backwash usage is approximately 30,000 gallons per filter with typical discharge flows on recent Discharge Monitoring Reports reported at 10,000 gallons.

Records / Reports

Division staff reviewed the operational reports maintained on-site by the water system. The records reviewed were from May 2013 to October 2014 and were readily available. For this same time period, Division staff noted that ACWA has not experienced any excursions that would be required to be reported to the Division.

Prior to August 2014, ACWA was only submitting Discharge Monitoring Reports (DMR) to the Division's central office. Please continue to submit copies of the DMR to both the Division's central office and field office for review. If you would like, both the DMR and drinking water reports can be submitted at the same time as long as the Division receives them no later than ten days following the end of the reporting period.

Effluent / Receiving Waters

Backwash water from the ACWA WTP #1 filters is sent to one lagoon where the water is allowed to settle before being discharged via a valve to the Clinch River. During the on-site inspection, the lagoon appeared to be in good condition and fit for its intended purpose. The discharge point was also viewed and it appears that adequate settling is being provided prior to discharging. The discharge point was identified by a posted sign as required by the permit. However, the wording on the sign has faded over time. The Division will recommend that the sign be updated so that information regarding the discharge permit is clearly visible. Sign requirements and information can be found on page 20 of the General NPDES Permit for Discharges of Filter Backwash and Sedimentation Basin Washwater from Water Treatment Plants.

Sludge Handling

As a part of the inspection, Division staff discussed the sludge handling process. The water system removes the sludge from the lagoon every four to five years and applies it on-site at the water treatment plant. In a Memorandum of Agreement between the Division of Water Resources and the Division of Solid Waste Management, water treatment plant by-product must be used for beneficial purposes on cropland or grassland in order to avoid taking it to a landfill or obtaining a permit through the Division of Solid Waste Management. Attached is a copy of the Standard Operating Procedures developed by the Division of Water Resources in 1999 regarding beneficial application of water treatment by-product. Prior to the next scheduled clean-out of the backwash lagoon, ACWA will need to find a suitable site for beneficial application of the water treatment by-product rather than using it as fill material.

Laboratory and Self-Monitoring Program

Most of the required parameters listed in the NPDES permit are sent to a private laboratory for analysis. For those parameters that are conducted in house, ACWA will need to begin following the Standard Method Update requirements for their laboratory processes. Attached is information on the Standard Method Update requirements for pH and Total Chlorine. If you need additional information on any other parameters, please contact the Division.

During the inspection, Division staff inquired about chlorine residual monitoring. ACWA was utilizing the free chlorine test method for compliance reporting purposes. ACWA will need to begin using the Total Chlorine Residual test method for the filter backwash discharge reporting. The water system should be able to use the same test equipment, but will need to obtain total chlorine DPD reagents and allow the reagents to react for about three minutes before analyzing.

Conclusion

Overall, ACWA is providing adequate treatment of the filter backwash and sedimentation basin water prior to discharge and consistently meeting their permit requirement. Please respond by January 23, 2015, on the actions ACWA will take to address the comments above. If you have any further questions or comments regarding the Compliance Evaluation Inspection, please do not hesitate to contact me at (865) 594-5564, or Bryan Epperson at (865) 594-5515.

Sincerely,



Erich Webber
Division of Water Resources
Knoxville Environmental Field Office

cc: Mr. Larry Clowers, General Manager, Anderson County Water Authority
Mr. Jeff Elliott, Chief Operator, Anderson County Water Authority
Central Office
File



TDEC - Division of Water Resources
Knoxville Field Office

ICIS NPDES Facilities Inspection Report

Facility Data

NPDES ID:	TN0073253	Facility Site Name:	Anderson County Water Authority WTP#1		
		Address:	1943 Oak Ridge Hwy, Clinton, TN 37716		
Permit Eff. Date:	Aug 30, 2010	Permit Exp Date:	Jun 30, 2015	SIC Code:	4941

Compliance Monitoring Information

Compliance Monitoring Activity Name:	Compliance Evaluation (non-sampling) (CEI)				
	* If Bio Monitoring is selected above, select the method used:				
Compliance Monitoring Activity:	Evaluation				

Compliance Monitoring Dates/Times

Entry Date/Time (mm/dd/yyyy hh:mm):	11/21/2014 9:00	Exit Date/Time (mm/dd/yyyy hh:mm):	11/21/2014 10:45
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Facility Representatives

Mr. Jeff Elliott, Chief Operator, 865-426-6206	Mr. Larry Clowers, General Manager, 865-457-9506
On-Site Representative(s) Title, Phone Number	Responsible Official(s), Title, Phone Number

Statute and Section Information

Federal Statute:	CWA - Clean Water Act	State Statute:	Tennessee Water Quality Control Act
Programs:	NPDES- Base Program (Limits, Reporting, & Schedule)		

Compliance Monitoring Reason:	Core Program				
Compliance Monitoring Agency Type:	State	Agency Name:	TDEC - DWR		
Did EPA assist/ Inspection?	No	Time Physically conducting activity: Days:	1	Hours:	0
Inspection Type:	State	Compliance Monitoring Action Outcome:	No Violation		
Lead Agency:	State	Compliance Monitoring Rating Code:	Satisfactory		
If Joint Inspection, what was the purpose of the other party?					

Areas Evaluated During Inspection (Check only those areas evaluated)

<input checked="" type="checkbox"/> Permit	<input type="checkbox"/> Self - Compliance Program	<input type="checkbox"/> Pretreatment
<input checked="" type="checkbox"/> Records / Records	<input type="checkbox"/> Compliance Schedule	<input type="checkbox"/> Pollution Prevention
<input checked="" type="checkbox"/> Facility Site Review	<input type="checkbox"/> Laboratory	<input type="checkbox"/> Storm Water
<input checked="" type="checkbox"/> Effluent / Receiving Waters	<input type="checkbox"/> Operations & Maintenance	<input type="checkbox"/> Combined Sewer Overflow
<input type="checkbox"/> Flow Measurement	<input checked="" type="checkbox"/> Sludge Handling / Disposal	<input type="checkbox"/> Sanitary Sewer Overflow

Compliance Monitoring Summary

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EPA and State Representatives

Erich Webber	TDEC, Knoxville Field Office, 865-594-5564	Dec 16, 2014
Inspector's Signature	Agency / Office / Phone	Date
Michael Atchley	TDEC, Knoxville Field Office, 865-594-5564	12/16/14
Manager's Signature	Agency / Office / Phone	Date